

Work Order ID 139757

139757

Page 1

Monday, December 07, 2015 9:09:50 AM

Item ID: D3969-5 Accept *N900040100* Setup Start *NS1*

Revision ID:

Item Name: Spring (Basket Lid) Stop *NS2*

Start Date: 12/7/2015 Start Qty: 2.00 *2*

Required Date: 12/11/2015 Req'd Qty: 2.00 *2*

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: 12.07 Tooling: _____ Date: _____ Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3969	C

100 0.00

100

Purchasing

Purchasing

Memo

30676
Issue P/O: ~~DEC 07 2015~~
Order as per Dwg D3969
Possible supplier: LS Technologies
part#: SSA4/6-122-315-133N
Material release note is required

0.00

CL DEC 07 2015 2

110 Receive & Inspect for Damage & Mat'l Certs 0.00

110

Packaging

Packaging

Memo

***Measure compression only at
5mm on gas spring***

0.00

2x SP15-1209

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging Supplier ☐ Engineering Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Work Order ID 139757***139757***

Page 2

Monday, December 07, 2015 9:09:50 AM

Item ID: D3969-5 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Spring (Basket Lid)
Start Date: 12/7/2015 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 12/11/2015 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC6- Inspect dimensions to drawing	0.00							
120									
QC	Memo	0.00							DAS
Quality Control	***Measure compression only at 5mm on gas spring***								9
									9-89
130	Identify as per dwg & Stock Location <u>St363</u>	0.00							
130									
Packaging	Memo	0.00							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

② 15-12-14 33 lbs. 9-89

2 9-89 DEC 15 2015

ML5 DEC 15 2015

ML5 DEC 15 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Monday, December 07, 2015 9:09:55 AM

Page 1/1

Work Order ID: 139757

139757

Parent Item: D3969-5

D3969-5

Parent Item Name: Spring (Basket Lid)

Start Date: 12/7/2015

Required Date: 12/11/2015

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A new issue DD 10.03.16 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

SSA4/6-122-315-133N

Purchased

No

Each

0.0000

SSA4/6-122-315-133N

**

Gas Spring

2x SP15-12-09

DQA: _____ Date: _____



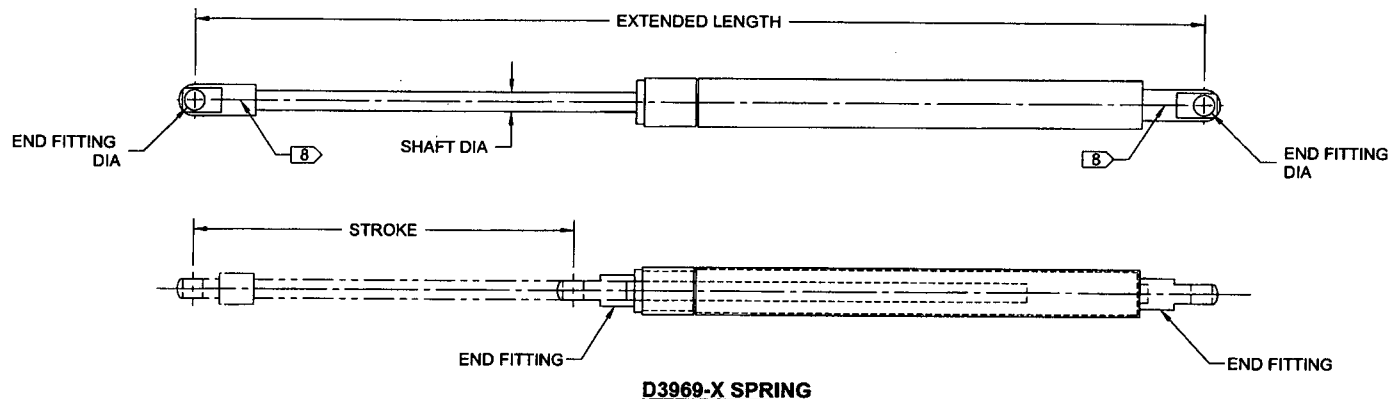
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

SPECIFICATION CONTROL DRAWING



DART PART NUMBER	STROKE (mm/in)	EXTENDED LENGTH (mm/in)	SHAFT DIA (mm/in)	FORCE (N/lbs)	END FITTING TYPE	END FITTING DIA (in)	CASING MATERIAL	PREFERRED SUPPLIER	SUPPLIER PART NUMBER	WEIGHT APPROX
D3969-1	120/4.70	315/12.40	6/0.24	310/69.7	BLADE	0.257	STAINLESS STEEL	LS TECHNOLOGIES	SSA4/6-122-315-310N	0.27 lbs
D3969-3	120/4.70	315/12.40	8/0.31	360/80.9	BLADE	0.257	STAINLESS STEEL	LS TECHNOLOGIES	SSA4/8-122-310-360N	0.32 lbs
D3969-5	120/4.70	315/12.40	6/0.24	133/29.7	BLADE	0.257	STAINLESS STEEL	LS TECHNOLOGIES	SSA4/6-122-315-133N	0.27 lbs

RELEASED
2010-03-12

NOTES:

- 1) MATERIAL: SEE CHART
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3969-X" AND B/N USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: SEE CHART
- 8) CRIMP END FITTING AT APPROXIMATE LOCATION SHOWN, PER MANUFACTURERS REQUIREMENTS

C	REDRAWN IN SW. ADDED -3 & -5; ADDED SHAFT DIA COLUMN TO CHART. FORCE FOR -1 CORRECTED (WAS 60.0 lbs.)	JPH	10.03.04
B	DRAWING RENAMED WAS: GAS SPRING (BASKET LID). NOTE B ADDED.	AJS	09.11.10
A	NEW ISSUE	AJS	09.07.27
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	qj	DRAWING NO. REV. C	
MFG. APPR.	N/A	D3969 SHEET 1 OF 1	
APPROVED	AW	TITLE SCALE	
DE APPR.	AW	BASKET LID SPRING NTS	
DATE	10.03.04	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

15-12-07
139757

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐					



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO30676

Purchase Order Date 12/7/2015

PO Print Date 12/7/2015

Page Number 1 of 2

Order From :

VC-LST0001

LS TECHNOLOGIES INC.
314 JESSOP AVE
SASKATOON, SK S7N 1Y6
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAXED

Contact Name

Vendor Phone 306 683 5000

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

EXW - (Ex Works)

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
	Line Comments		Promise Date				
	Delivery Comments						
1	SSA4/6-122-315-133N	Gas Spring	12/10/2015		2.00	\$65.00	\$130.00
			Yes		Each		
			12/10/2015				
	AS PER DWG D3969 REV. C B139757						
Line Total:							\$130.00
2	SSA4/6-122-315-133N	Gas Spring	12/10/2015		1.00	\$65.00	\$65.00
			Yes		Each		
			12/10/2015				
	AS PER DWG D3969 REV. C B139762						
Line Total:							\$65.00

NOTE: THE PART NEED TO BE AT 50 LBS/F ONLY

PO Instructions: Fedex Acc#151793240

Note:

12/7/2015

LS Technologies Inc
314 Jessop Ave
Saskatoon, SK S7N 1Y6

Ph: 306-683-5000 Fax: 306-683-6403

Packing Slip

P.O. No.	Date	Invoice #
30676	12/08/2015	14144

Bill to:
Dart Aerospace Ltd 1270 Aberdeen St. Hawkesbury, ON K6A 1K7

Ship to:
Main Finished Goods Location Dart Aerospace Ltd 1270 Aberdeen St. Hawkesbury, ON K6A 1K7

Ship	Via	FOB
12/08/2015	Fed-Ex	

Qty	Description
2	D3969-5 B139757 Stainless Gas Spring (SSA4/6-122-315-133N)
1	D3969- B1397652 Stainless Gas Spring (SSA4/6-122-315-225N) 50 Lb Force
Shipping Via FED EX Tracking #	
Sp/15-12-09.	

Order checked by: 



LS Technologies Inc
314 Jessop Ave
Saskatoon, SK, S7N 1Y6
Ph: (306) 683-5000 Fax: (306) 683-6403

Certificate of Conformance

Dec 08, 2015

This is to certify that the parts listed below meets specifications as required by your order.

2 Units : D3969-5 B139757 Stainless Gas Spring (SSA4/8-122-310-133N)

1 Unit: D3969- B139762 Stainless Gas Spring (SSA4/6-122-315-225N) 50 Lb Force

Country of Manufacture : Canada

Date of Manufacture : Oct 2015

This product is ROHS compliant.

Purchase Order # 30676

Inv# 14144

SP15-12-09.

L S Technologies Inc Canada

Nolan Fehr
President